



State of Utah

Division of Facilities Construction and Management
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ADDENDUM NO. 1

Date: March 23, 2004
To: Interested Parties
From: Bill Bowen, DFCM Program Director
Reference: Weber State University
Engineering Technology Building Remodel
DFCM Project #02148810

1. Contractor will be provided a lay-down area in the parking lot A4 adjacent to the east of the Engineering Tech bldg.
2. The agency will provide contractors with a maximum of two (2) parking passes.
3. The agency will provide contractors with building keys upon receipt of a deposit (\$150 per key).
4. The contractor will be required to obtain "Sidewalk Permits" for operating vehicles on campus sidewalks.
5. The contractor will be able to utilize building power and water.
6. The contractor will be able to utilize building restrooms, until such time as this convenience may be abused.
7. The contractor will be required to demo the CMU wing walls attached to the CMU wall at column line "R".

End of Addendum Number 1



Addendum No. 1

Issued: 03/23/04

**Addendum No. One
for the
Weber State University Engineering Technology Building Remodel
Remodel Bid Documents
DFCM Project No. 02148810
WSU Project No. ET-01006
MHTN Project No. 2003604**

All Contractors submitting proposals on the above captioned project shall be governed by the following addendum, changes and explanations to the bidding documents and shall submit their bids in accordance therewith:

Changes to The Project Manual:

- A1.1 Section 06402- Interior Architectural Woodwork, Paragraph 1.2, Item A.** Revise the scope to indicate the casework that is provided in this section. Delete subparagraph b as it is currently written. Revise Item A to read:
- A. This Section includes the following:
 - a. Plastic-laminate cabinets (plastic covered casework) with PVC edging **in Room 139.**
 - b. Plastic-laminate **Podiums in Rooms 127 and 139, Countertops for tables in Room 139, and shelves in Rooms 133E and 133F.**
 - c. **Hardwood rails and table legs at Tables in Room 139.**
- A1.2 Section 06402- Interior Architectural Woodwork, Paragraph 1.2, Item B.** Add a new subparagraph 2. The item shall read:
- 2. Division 12 Section "Plastic Laminate Laboratory Casework" for plastic-laminate cabinets and countertops for the research labs, Research Support Storage Room 133D, and Lab Prep Room 139A.
- A1.3 Section 06402- Interior Architectural Woodwork, Paragraph 2.1, Item F- Chemical-Resistant, High-Pressure Decorative Laminate.** Delete this paragraph in its entirety. Label the paragraph as 'Not Used.'
- A1.4 Section 06402- Interior Architectural Woodwork, Paragraph 2.1, Item I- Solid-Surfacing Material.** Delete this paragraph in its entirety. Label the paragraph as 'Not Used.'
- A1.5 Section 06402- Interior Architectural Woodwork, Paragraph 2.1, Add Items J, K, and L.** Items J, J, and L shall read:
- "J. Hardwood:**
 - a. Hardwood lumber, clean and free from defects. All lumber kiln dried to uniform moisture content of six (6) percent.
 - (1) Exposed material: Red oak.
 - K. Plywood to match Hardwood:**
 - 1. Hardwood plywood featuring a balanced construction glued with water resistant resin glue.
 - (1) Core: 7-ply veneer core plywood.
 - (2) Exposed face veneer: Plain sliced red oak veneer selected for golden wheat color and narrow hearts.
 - L. Finish at Hardwood and Plywood to match Hardwood: Highly chemical resistant acrylic**

urethane finish with built-in UV blocker applied over stain of selected color from manufacturer's standard color offering.

1. Preparation: Sand exposed surfaces smooth, free from dirt and defects.
2. Stain application: Apply stain of color selected to all exposed table leg and rail surfaces. Apply in a manner to achieve a match with the selected color sample upon completion of application of the finish.
3. Finish application: Apply finish coats evenly, force dry in a dust-free atmosphere, sand and wipe clean surfaces between coats to produce a smooth, satin luster finish. Surfaces exposed to view shall be water clear and bright. Apply multiple coats sanded between coats with final 1.5 dry mil thick, minimum, finish.

A1.6 Section 06402- Interior Architectural Woodwork, Paragraph 2.4, Item B. Add subparagraph 12. It shall read:

- "12. Pull-out shelf: ADA Compliant pull-out work surface (full extension 31 ½" deep x 21 ½" wide) "Rapid Pull-Out Table" as manufactured by Hafele.**
(1) Pull-out table to be equipped with full extension with overall load capacity of 100 lb (evenly distributed loads)."

A1.7 Section 06402- Interior Architectural Woodwork, Paragraph 2.8. Add Item G. It shall read:
"G. Instructor's Podium desktop power and communication flush-mounted receptacle. Provide and install 'Phantom' 2-gang underdesk Spiderbox by Spider Manufacturing, Inc. of Canada. Represented by Mockett in the U.S.- Model number PCS8."

A1.8 Section 06402- Interior Architectural Woodwork, Add Paragraph 2.9. Add the following:
2.9 Table Frames:

- A. Perimeter rails: ¾" x 4-5/16" 7-ply plywood with attached steel corner braces, grooved and screwed into both rails at each corner. Groove rails for 'Z' irons or drill for top attachment.**
- B. Reinforcing cross rails: Hardwood doweled and glue into front and back rails and pinned at intervals not more than 33" o.c. in tables without drawers.**
- C. Legs: 2" x 2" hardwood with 3/8" #16 hanger bolt inserted 1-3/4" into leg for fastening to perimeter rail corner brace.**
- D. Leg shoes: Black rubber or vinyl with provisions for floor clip.**

A1.9 Section 07540- Thermoplastic Membrane Roofing. Delete the entire specification section as written. Insert the attached specification section, dated March 23, 2004. The section attached clarifies the existing holder of the roof Installers' Warranty, membrane type, and membrane color.

A1.10 Section 08110- Steel Doors and Frames, Paragraph 2.3, Item A. Delete Subparagraph 1 entitled "Interior Doors" in its entirety. Renumber Subparagraph 2 entitled "Exterior Doors" to be Subparagraph 1.

A1.11 Section 08710- Door Hardware, Paragraph 2.3, Item B. Delete Item B regarding ASSA-compatible cylinders in its entirety. Renumber Item C regarding key control cabinets to be Item B.

A1.12 Section 09265- Gypsum Board Shaft-Wall Assemblies. Add this section in its entirety. See attached.

A1.13 Section 09651- Resilient Tile Flooring. This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.

A1.14 Section 09653- Resilient Wall Base and Accessories. This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.

- A1.15 Section 09912- Painting.** This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.
- A1.16 Section 10100- Visual Display Boards.** This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.
- A1.17 Section 10520- Fire-Protection Specialties.** This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.
- A1.18 Section 11132- Projection Screens.** This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.
- A1.19 Section 11610- Laboratory Fume Hoods.** This section was inadvertently missing from the hard copy of the project manual. The section is available on DFCM's website, dated March 8, 2004.
- A1.20 Section 11610- Laboratory Fume Hoods, Paragraph 1.2, Item A.** Revise the following items to read:
2. Fume hood base cabinets. (Delete the reference to countertops.)
 3. **Not used.** (The base stand used in the Lab Prep is existing.)
- A1.21 Section 11610- Laboratory Fume Hoods, Paragraph 1.2, Item B4.** Delete this entire item—and the reference to Division 12. The fume hood base cabinets are specified in Section 11610.
- A1.22 Section 11610- Laboratory Fume Hoods, Paragraph 1.4, Items C and D.** Delete these paragraphs in their entirety. Samples are not required.
- A1.23 Section 11610- Laboratory Fume Hoods, Paragraph 2.2, Item M.** Revise to read:
- M. Base cabinets.**
1. **Acid Storage Cabinets.** Provide acid storage cabinets made from sheet steel of not less than .0428 inch (1.1 mm). Intermediate horizontal rails, table aprons and cross rails, center posts, and top gussets shall be .0528 inch (1.35 mm). Leveling and corner gussets shall be .0966 inch (2.5 mm). Acid storage-cabinet lining shall be ¼ inch (6-mm) thick, glass-fiber cement board complying with ASTM C 1186, polyethylene, polypropylene, epoxy, or phenolic-composite lining material. The cabinets shall be manufactured by Fisher Scientific or by Labconco. The liner insert shall form a one-inch pan at the bottom to retain spillage. The door shall be lined with a polyethylene sheet. Each cabinet shall be vented into the fume hood with a 1 ½" vent pipe, providing a positive airflow directly into the fume hood exhaust system.
 2. **Flammable Storage Cabinets.** Provide flammable storage cabinets that are UL labeled and specifically designed for the storage of flammable and combustible liquids. Construction shall be based upon the requirements listed by UL, UFC, OSHA, and NFPA No. 30. The bottoms, top, sides, and doors shall be fabricated of 18 gauge steel and shall be all double panel construction with a 1-1/2" air space between panels. All joints shall be welded, or screwed, to provide a rigid enclosure. The doors shall swing on full-length stainless steel piano hinges and shall be fully insulated. The right hand door shall be equipped with a three point latching device and the left hand door shall have a full height astragal. The doors are self-closing and synchronized so that both doors will always fully close. The right hand door is quipped with a three point latching system that automatically engages when the doors close. A 2" deep liquid tight pan that covers the entire bottom of the cabinet shall be furnished to contain liquid leaks and spills. A full-depth adjustable shelf is also provided. The shelf is perforated to allow air circulation within the cabinet. The cabinet shall have interior finish same as exterior. The cabinet shall be labeled: "FLAMMABLE- KEEP FIRE

AWAY.” The cabinets shall be manufactured by Fisher Scientific or by Labconco.

- A1.24 Section 11610- Laboratory Fume Hoods, Paragraph 2.2, Item N.** Delete this paragraph in its entirety. Label the item “Not Used.” The fume hood base stand for use in the Lab Prep Room is existing.
- A1.25 Section 11610- Laboratory Fume Hoods, Paragraph 2.2, Item O.** Delete subparagraphs 1, 2, 3, and 4. The worksurfaces in the fume hoods are existing. Label the items “Not Used.” Clarify subparagraph 5 for the contractor to coordinate the size of the cupsink with the existing cutout in the existing worksurfaces.
- A1.26 Section 12362- Plastic Laminate Laboratory Casework.** The first page of this section was inadvertently missing from the hard copy of the project manual. The page is available on DFCM's website, dated March 8, 2004.
- A1.27 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 1.2, Item A.** Revise subparagraph a to clarify the extent of casework. The item shall read: “a. Acid-Resistant Plastic Laminate laboratory casework **in the research labs, Research Support Storage Room 133D, and Lab Prep Room 139A.**”
- A1.28 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 1.2, Item A.** Revise subparagraph d to include epoxy countertops. The item shall read: “d. **Epoxy** and Acid-Resistant Plastic Laminate countertops.”
- A1.29 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 1.2, Item B.** Add the following subparagraph f. The item shall read: “f. Division 6 Section “Interior Architectural Woodwork” for plastic laminate casework in Room 139, Podiums in Rooms 127 and 139, Tables in Room 139, and shelves in Rooms 133E and 133F.
- A1.30 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 1.4, Item C.** Delete the epoxy sinks from the list of items requiring Samples for Initial Selection. The item shall read: “**For factory-applied finishes, furnish Acid-Resistant Plastic Laminate Countertops.**”
- A1.31 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.2, Item E Construction, Item 1.h Shelves.** Revise subparagraph (2) to read: “(2) **The depth of the shelf shall be the full depth of the base cabinet or 2'-0” deep maximum. Provide drawer suspension hardware mounted to the sidewall of the cabinet and to the underside of the shelf for pull-out operation on metal glides. Refer to 12362 2.2E Construction, 5 f, Drawer suspension.**”
- A1.32 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.2, Item E Construction, Item 5 Hardware.** Delete Item F- Pull-out Shelf in its entirety. The paragraph has been moved to Section 06400. See addendum item above.
- A1.33 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.2, Item E Construction, Item 2g.** In Item (1) revise the thickness of shelves 12” to 30” long to be **1”** in lieu of $\frac{3}{4}$ ”. Revise the thickness of shelves over 30” long to be **1 ¼”** in lieu of 1”.
- A1.34 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.3.** Revise the title of the section to read: “**COUNTERTOPS AND SINKS.**”
- A1.35 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.3, Item B.** Revise the title of the section to read: “Epoxy **Countertops and Sinks.**”
- A1.36 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.3.** Revise the section to add:

D. Countertops, General: Provide units with smooth surfaces in uniform plane free of defects. Make exposed edges and corners straight and uniformly beveled. Provide front and end overhang of 1 inch (25 mm), with continuous drip groove on underside ½ inch (13 mm) from edge.

E. Acid Resistant Plastic-Laminate Countertops:

- a. **Quality Standard:** Comply with AWI Section 400 requirements for high-pressure decorative laminate countertops.
- b. **Grade:** Premium.
- c. **High-Pressure Decorative Laminate Grade:** HGP.
- d. **Colors, Patterns, and Finishes:** Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements: Match Architect's sample.
- e. **Edge Treatment:** PVC edging.
- f. **Core Material:** Exterior-grade plywood core for tops at sinks.

A1.37 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.4. Delete Items B and C for Upright Rod Assembly and Metal Crossbar and Burette Rods in their entirety.

A1.38 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.6, Item C. Delete this item in its entirety. The paragraph has been moved to Section 06400. See addendum item above. Renumber the following paragraphs accordingly.

A1.39 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.6, (formerly Item D-Switches). Delete this item in its entirety.

A1.40 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.6, (formerly Item E-Pedestal-Type Fittings). Delete the item in its entirety.

A1.41 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.6, Item C.a (formerly Item F.a). Revise the color of the receptacles and switches to **White** in lieu of Ivory.

A1.42 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.6, Item D (formerly Item G). Revise the color of the cover plates to **white** in lieu of satin finish, type 304, stainless steel.

A1.43 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item A. Delete the words 'swing-spout' from the description of the faucet.

A1.44 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item B.a. Delete the word 'Vacuum' from the list of service-fittings mounted in the base cabinets.

A1.45 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item B.c. Add 'and at 90 degrees, as indicated' to the outlet description. The item shall read: "c. Outlets: Two, at 180 degrees and at 90 degrees, as indicated."

A1.46 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item B.d. Revise the note to read: "d. Outlet Type: Straight for 180 degree outlets and Angle for 90 degree outlets."

A1.47 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item C.a. Delete the reference to pedestal-type electrical service-fittings. Revise the note to read: "a. Type of Fitting: Recessed duplex receptacle, as indicated."

A1.48 Section 12362- Plastic Laminate Laboratory Casework, Paragraph 3.8, Item C.b. Revise the note to read: "Device: As indicated on electrical drawings."

A1.49 Section 12710- Lecture Hall Furnishings, Paragraph 1.2, Item A1 and B2. MHTN would like to 420 East South Temple, Suite 100 . Salt Lake City . Utah . 84111 . 801.595.6700 . Fax 801.595.6717 . www.mhtn.com

clarify that the computer power and data outlets are items in Division 16 mounted to the modesty panel in a raceway. Revise Item B2 to read: "Division 16 Sections for **raceway**, power cabling, and data connections."

A1.50 Section 12710- Lecture Hall Furnishings, Paragraph 2.3, Item C- Data Tray. Delete this item in its entirety. Label this item as "Not Used."

A1.51 Section 16660- Seismic Bracing, Paragraph 1.3, Item D. This item notes a Certificate of Approval be furnished by the contractor for seismic bracing. A bidder inquired about a recognized testing agent. Our response: A recognized testing agency is not required. Installation must meet seismic code and will be inspected by the Engineer and DFCM Inspector. The "Certificate of Approval" refers to the DFCM inspection report.

Changes to The Drawings:

A1.52 Sheet SF101, Detail A: Revise the detail references for the top of wall details in two locations to reference sheet SF101 in lieu of S1.2 and S1.3. Indicate the new wall bracing locations in plan for 1/SF101 and 2/SF101. Indicate the location and detail reference for new floor framing at the new floor opening at the 2nd Level for the exhaust duct.

A1.53 Sheet SF101, Detail B: Add the entire plan, Detail B, showing the location and detail reference for new roof framing at the new roof opening for the exhaust duct.

A1.54 Sheet SF101, Details 3 and 4: Add two details indicating new floor and roof framing at new penetrations.

A1.55 Sheet AE101, Symbols Legend. Revise the note indicating no shading for Acid Resistant Plastic Laminate Countertops to eliminate the Ecology/Zoology Lab from the list. The note shall read: "No shading on the Casework Plan indicates the locations of acid resistant plastic laminate countertops in all research labs, the Research Support Storage, **and** Lab Prep."

A1.56 Sheet AE101, Detail C2, Floor Plan. Add a partition type reference 3 on top of the existing wall 3'-6" north of Grid R. The wall shall extend from existing top of wall to underside of structure at Level 2. The wall forms the south boundry for Control Area 1 shown on the Life Safety Plan. Provide firestopping at penetrations of the wall. Revise wall section A5/AE301 accordingly.

A1.57 Sheet AC101, Life Safety Plan. Clarify that the Control Area 2 shown in Hallway 133G extends from the wall north of Grid M to the wall north of Grid R, with the exception of Chemistry Research Lab 133C, Existing Men 129, Existing Women 131, and the existing stair. A one-hour floor-ceiling assembly shall be provided at the Level 2 floor slab/Level 1 framing level. Refer to other addendum items for extent of new rated partitions and suspended gypsum board ceiling.

A1.58 Sheet AC101, Level 1 Reflected Ceiling Plan. Provide a gypsum board ceiling directly below the bottom of the bottom chord of the existing long span joists in the following rooms: 133E, 133F, 133D, 133G, 133C, 133B, 133H, 133, 135, 137, 133A, and 139A. The ceiling shall be suspended with a metal suspension system of 7/8" metal furring channels and 1 1/2" deep, 16 gauge cold rolled steel channels. The ceiling shall be approximately 6" below the bottom chord of the long span floor joists. This ceiling is in addition to the decorative suspended ceilings already scheduled in the reflected ceiling plans. Coordinate the suspension of equipment, ceiling anchorage, lights, and other features with the additional concealed ceiling. This gypsum board ceiling is required to create a one-hour rated floor/ceiling assembly at the Level 2 slab for the control areas. The assembly, including the ceiling, shall comply with UL Design G531. It is generally intended that all new piping, conduit, and ductwork be routed in the space between the finished ceiling and rated floor/ceiling assembly. Provide small and 2'-0" x 2'-0" metal access panels from the space above the finished ceiling into the rated floor/ceiling assembly to access existing dampers and features requiring maintenance as required. Membrane and Through-Penetrations of the gypsum board ceiling by new and existing features shall be firestopped per IBC Section 712.4.

- A1.59 Sheet AE301, Detail E1.** Remove the wood blocking below the equipment curb in the plane of the gypsum roof deck. Show the steel channel on the east and west sides of the new roof opening, per the new structural details included in this addendum. Indicate that the new steel roof framing shall align with the equipment curb above. Add a dimension from the steel channel to the inside face of shaftwall partition. Indicate patch and repair of the existing roof membrane. Show the relationship between the duct and the edge of roof deck. Refer to the attached sketch, AD01-A01.
- A1.60 Sheets AE401 and AE402, General Notes.** Add General Note No. 13. The item shall read as follows: **"13. The 3 ½" wide end panels for laboratory casework shown in elevation, such as Detail E5/AE401, shall have 2" x 2" hardwood table legs concealed within plywood panels on both sides. The panels shall have acid-resistant plastic laminate surfaces."**
- A1.61 Sheet AE401, Detail E4 and Sheet AE402, Detail C4.** Revise the note for the fixed shelf at the top of the detail to indicate it is millwork specified by Division 6. Revise the note to read: **"13 inch wide shelf with ¾ inch wide by 2 inch high lip. Bracket supports. Refer to Division 6."**
- A1.62 Sheet AE401 and AE402, General Notes.** Revise General Note #4 to indicate that the toe kick is not rubber base at the Podiums. Revise the note to read: **"4. All casework toe kicks to be rubber base, except at Podiums. Refer to Details A2 and A4/AE402."**
- A1.63 Sheet AE402, Details E4 and D5.** Add a note to the detail that reads: **"Refer to Division 6 for casework specifications."**
- A1.64 Sheet AE402, Detail B3 and B4.** Add a note to the details that reads: **"Refer to Division 6 for table specifications."** Add a note to the details that read: **"The table legs and perimeter rails shall be hardwood and hardwood plywood."**
- A1.65 Sheet AE402, Detail A2 and A4.** Add a note to the detail that reads: **"Refer to Division 6 for podium specifications."**
- A1.66 Sheet AE602, Sheet Keynote 7.** Refer to the sentence that is the second to last in the note. It currently reads: "Install to match existing ceiling elevation..." Revise the sentence to read: **"Install to match existing ceiling elevation, approximately 9'-10 ½" above finished floor...."**
- A1.67 Sheet AE602, Sheet Keynote 8.** Provide a stainless steel corner guard in lieu of a steel angle corner guard. Revise the note to read: **"Finish corner of cmu where glazed partition is removed. Provide surface-mounted stainless steel corner guard the entire exposed height of the wall. Provide impact-resistant wall protection system product SSCG3 by Balco, Inc or equivalent. The corner guard shall be satin-finish stainless-steel plate Type 304 (minimum thickness .0625 inch); the guard shall have a 90-degree turn to match wall condition. The wing size shall be 3" x 3". Corner radius shall be 1/8 inch. Provide mounting plate with concealed fasteners."**
- A1.68 Sheet AE602, Sheet Keynote 9.** Clarify that the fire sealant noted in the third sentence shall be installed where the gypsum board abuts the concrete floor and where it abuts the duct. Add a new sentence following the third sentence that reads: **"Fire sealant shall be installed to fill the joint between the horizontal layer of gypsum board and the concrete floor and between the horizontal layer of gypsum board and the duct..."** The remainder of the note shall read as currently written. Add a sentence at the end of the note. It shall read: **"Provide a 22+/-" diameter opening at the gypsum roof deck centered on the duct."**
- A1.69 Sheet AE602, Detail A4.** Add a wall type partition reference on the east side of the hazardous exhaust duct shaft. The partition type shall reference type 10A.
- A1.70 Sheet AE602, Detail A4.** Refer to the dimension for the outside shaft enclosure in the east-west

direction labeled: "3'-6" SQ." Revise the dimension to read: "3'-6". Add a dimension for the outside shaft enclosure in the north-south direction. The dimension shall read: "3'-2".

A1.71 Sheet AE602, Equipment Schedule, Mark 3, Emergency Shower. Indicate a 1 1/4" tempered water connection in lieu of the 1" tempered water connection shown in the Remarks column.

A1.72 Sheet AE602, Equipment Schedule, Mark 7, Purified Water Tanks. Indicate a 1/2" connection in lieu of the X currently shown in the cold water plumbing requirements column.

A1.73 Sheet AE602, Equipment Schedule, Mark 12, Ice Machine. Indicate a 2" indirect connection in lieu of the X IN. currently shown in the waste plumbing requirements column.

A1.74 Sheet AE602, Equipment Schedule, Mark 13, Acid Storage Cabinet. Indicate a 1 1/2" connection in lieu of the 2" currently shown in the vent plumbing requirements column.

A1.75 Sheet EE001. AIC rating of panel "1UPS" to be 10,000. Mechanical Schedule, change 2 HP exhaust fan to 3 HP.

A1.76 Sheet EE001, Lighting Fixture Schedule.

The following **additional** manufacturers are approved to bid. Approval of the equipment from catalog information indicates that the brand name and general characteristics are acceptable to the Engineer. Any conflict arising from use of the substituted equipment shall be the responsibility of the Supplier who shall bear all costs required to make the equipment comply with the intent of plans and specifications.

The following additional manufacturers are approved:

Light Fixture Type

T-1	Lightolier
T-2	Lightolier, Daybrite
EX-1	Lightolier

A1.77 Sheet EL101. Reference Note #19, Wiremold series 4000 are to be provided complete with divider for power and voice/data cables, divider clips, wire clips, coupling, etc. for a complete installation.

A1.78 Sheet EL101. Provide a new fused disconnect switch (30 amp. with 10 amp. time delay/current limiting fuses) in Nema 3R on the roof for exhaust fan no. 28. Tie the exhaust fan through this disconnect to the combination starters and disconnect in the tunnel.

Changes to the Mechanical Drawings and Specifications:

A1.79 Refer to the attached Mechanical Addendum No. 1 document, dated March 23, 2004.

Clarifications to The Drawings:

A1.80 Sheet SF101. Revise the Level One Plan to be named Partial Existing Second Level Framing Plan. Label the plan as Detail A/SF101.

A1.81 Sheet SF101, Details 1 and 2. Add detail numbers for the two details for wall bracing.

A1.82 Sheet AE101, Detail C2: Refer to the curved partition at the northeast corner of the Chemistry Research Lab 133C. The rated partition is the curved pair of lines at the Hallway side of the partition. The straight line on the Chemistry side of the wall is a furred partition. Refer to the detail of Wall Type 12 which is referenced at that location.

A1.83 Sheet AE301, Detail E3: Void this detail. There should be no new vent penetrations through the 420 East South Temple, Suite 100 . Salt Lake City . Utah . 84111 . 801.595.6700 . Fax 801.595.6717 . www.mhntn.com

roof. Existing vents have been reused.

A1.84 Sheet AE301, Roof Level Notes. Delete Note No. 3 regarding new vents. There should be no new vent penetrations through the roof. Existing vents have been reused.

A1.85 Sheet AE402. The tables in details B3 and B4 in Room 139 are fixed to the floor. Refer to Specifications Section 12362- Plastic Laminate Laboratory Casework, Paragraph 2.2- Cabinet Materials, Item E-Construction, Subparagraph 4- Table frames, Sub-Subparagraph d- Leg shoes on page 12362-8. Anchor the tables to the floor with the floor clips noted.

A1.86 The Research Labs include rooms 133A, 133B, 133C, 133E, and 133F.

Attachments:

Cover letter from Bill Bowen, DFCM	3/23/04	1 page
Mechanical Addendum No. 1	3/23/04	2 pages
Section 07540- Thermoplastic Membrane Roofing	3/23/04	3 pages
Section 09265- Gypsum Board Shaft-Wall Assemblies	3/23/04	5 pages
Sheet SF101	3/19/04	
Sketch AD01-A01	3/23/04	
Sketch ADD 1.01	3/23/04	
Sketch ADD 1.02	3/23/04	
Sketch ADD 1.03	3/23/04	
Sketch ADD 1.04	3/23/04	
Sketch ADD 1.05	3/23/04	
Sketch ADD 1.06	3/23/04	
Sketch ADD 1.07	3/23/04	
Sketch ADD 1.08	3/23/04	
Sketch ADD 1.09	3/23/04	
Sketch ADD 1.10	3/23/04	
Sketch ADD 1.11	3/23/04	
Sketch ADD 1.12	3/23/04	
Sketch ADD 1.13	3/23/04	
Sketch ADD 1.14	3/23/04	
Sketch ADD 1.15	3/23/04	
Sketch ADD 1.16	3/23/04	

End of Addendum No. 1



Colvin Engineering Associates, Inc.

HIGH PERFORMANCE DESIGN

244 West 300 North, Suite 200 / Salt Lake City, Utah 84103-1147 / (801) 322-2400 / Fax (801) 322-2416

MECHANICAL ADDENDUM NO. 1

Weber State University Engineering Technology Building Renovation

DFCM Project 02148810
WSU Project ET01006

March 23, 2004

All contractors submitting proposals for this project shall be governed by the following addendum, changes, and explanations to the bidding documents. Bids shall be submitted in accordance with the following:

Item No.	Add, Delete or Clarify	Drawing No.	Reference / Description:
1	Clarify	PL101	ADD 1.01, ADD 1.02: Add keyed notes 9 and 10 instructing contractor to provide connections to future cup sinks Clarify General Note A and add General Note E
2	Clarify	PL102	ADD 1.03: Show location of and cold water hookups to trap primers Change detail call out 11/MH501 to 10/MH501
3	Clarify	PL102	ADD 1.04: Add keyed Note 2 to indicate trap primer location Modify keyed note 7 to clarify that hookups need to be provided to present and future hoods
4	Clarify	PL401	ADD 1.05: Clarify pipe sizes to emergency showers and eyewashes
5	Clarify	MH101	ADD 1.06 Change keyed note 4 to keyed note 1 at acid vent and indicate flow from cabinet Show location of thermostat for air handler
6	Add	MH101	ADD 1.07, Show locations of thermostats for alternate 1
7	Clarify	MH401	ADD 1.08: Indicate that vent from PT-1 shall be routed to outdoors
8	Clarify	MH401	ADD 1.09: Delete redundant two-way valve V-2, and add control point to existing three way valve
9	Change	MH401	ADD 1.10: Move smoke detector to air handler return
10	Change	MH501, Detail 6	ADD 1.11: Clarify detail

Item No.	Add, Delete or Clarify	Drawing No.	Reference / Description:
11	Clarify	MH501, Detail 8	Note that 10'-0" dimension above roof is minimum height of discharge
12	Clarify	MH501, Detail 8	Provide support as required for fan stability (i.e. guy wire, manufacturer's recommendations)
13	Change	MH501, Detail 10	ADD 1.12: Change connection size to shower, show cold water connection to trap primer
14	Change	MH601	ADD 1.13: Change exhaust fan motor size from 2 hp to 3 hp
15	Add	MH502, Detail	ADD 1.14: Add exhaust duct offset detail
16	Change	MH101	ADD 1.15: Move EF-28 to the west

END OF MECHANICAL ADDENDUM NO. 1

SECTION 07540 - THERMOPLASTIC MEMBRANE ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Patching and repair of **fully adhered** PVC membrane roofing system where new mechanical equipment penetrates existing system.
- B. Related Sections include the following:
 - 1. Division 6 Section "Miscellaneous Carpentry" for wood nailers, curbs, and blocking.
 - 2. Division 7 Section "Joint Sealants."

1.3 PERFORMANCE REQUIREMENTS

- A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another **and with existing materials** under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.

1.4 SUBMITTALS

- A. **Product Data: For each product indicated.**
- B. **Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.**

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: **Heritage Roofing, contact Jim Smith at 801-576-8447.**
- B. Source Limitations: Obtain components for membrane roofing system from roofing membrane manufacturer.
- C. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method

below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction.

1. Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated.

1.6 WARRANTY

- A. Special Warranty: Installer's warranty in effect for the existing installation remains in effect. **The building was re-roofed by Heritage Roofing in 1999; roofing was completed on November 4, 1999. The contact is Jim Smith at 801-576-8447.**

PART 2 - PRODUCTS

2.1 THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE

- A. **Fabric-Reinforced Thermoplastic Polyolefin Sheet:** ASTM D 4434, Type II, Grade I, fabric reinforced. **The membrane shall be fleece-backed to adhere to a thin layer of low-rise urethane foam.**
 1. Manufacturer: **Sarnafil Roofing Systems**
 2. Thickness: **80** mils, nominal.
 3. Exposed Face Color: **'Weber State Red' with black print pattern that approximates the Scoria rock on other campus roofs.**

2.2 AUXILIARY MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with **existing** membrane roofing.
 1. Liquid-type auxiliary materials shall meet VOC limits of authorities having jurisdiction.
- B. **Sheet Flashing: Manufacturer's standard unreinforced thermoplastic polyolefin sheet flashing, 55 mils thick, minimum, of same color as sheet membrane.**
- C. Bonding Adhesive: Manufacturer's standard **solvent**-based bonding adhesive for membrane, and solvent-based bonding adhesive for base flashings. **Provide a thin layer (approximately 1/8") of low-rise urethane foam, Carlisle Fast 100, or equivalent.**
- D. Miscellaneous Accessories: Provide pourable sealers, preformed inside and outside corner sheet flashings, T-joint covers, cover strips, **slip sheet**, and other accessories.

PART 3 - EXECUTION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.2 **ADHERED** ROOFING MEMBRANE INSTALLATION

- A. Install roofing membrane over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roofing membrane and allow to relax before installing.
- B. Bonding Adhesive: Apply solvent-based bonding adhesive to substrate and underside of roofing membrane at rate required by manufacturer and allow to partially dry before installing roofing membrane. Do not apply bonding adhesive to splice area of roofing membrane.
- C. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.
 - 1. Repair tears, voids, and lapped seams in roofing membrane that does not meet requirements.

3.3 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.
- B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with sheet flashing.
- D. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.

END OF SECTION 07540

SECTION 09265 - GYPSUM BOARD SHAFT-WALL ASSEMBLIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Shaft enclosures.
 - 2. Horizontal enclosures.
- B. Related Sections include the following:
 - 1. Division 9 "**Gypsum Board Assemblies**" for applying and finishing panels in gypsum board shaft-wall assemblies.

1.3 DEFINITIONS

- A. Gypsum Board Construction Terminology: Refer to ASTM C 11 for definitions of terms for gypsum board construction not defined in this Section or in other referenced standards.

1.4 PERFORMANCE REQUIREMENTS

- A. Structural Performance:
 - 1. Provide gypsum board shaft-wall assemblies capable of withstanding **the full** air-pressure loads indicated for maximum heights of partitions without failing and while maintaining an airtight and smoke-tight seal. Evidence of failure includes deflections exceeding limits indicated, bending stresses causing studs to break or to distort, and end-reaction shear causing track (runners) to bend or to shear and studs to become crippled.
 - 2. Provide gypsum board shaft-wall assemblies for horizontal duct enclosures capable of spanning distances indicated within deflection limits indicated.

1.5 SUBMITTALS

- A. Product Data: For each gypsum board shaft-wall assembly indicated.
- B. Fire-Test-Response Reports: From a qualified independent testing and inspecting agency substantiating each gypsum board shaft-wall assembly's required fire-resistance rating.
 - 1. Include data substantiating that elevator entrances and other items that penetrate each gypsum board shaft-wall assembly do not negate fire-resistance rating.

- C. Research/Evaluation Reports: Evidence of compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction that substantiate required fire-resistance rating for each gypsum board shaft-wall assembly.
- D. Acoustical-Test-Response Reports: From a qualified independent testing agency substantiating required STC rating for each gypsum board shaft-wall assembly.

1.6 QUALITY ASSURANCE

- A. Fire-Resistance-Rated Assemblies: Provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.
 - 1. Fire-Resistance-Rated Assemblies: Indicated by design designations from **UL's "Fire Resistance Directory."**
- B. STC-Rated Assemblies: For gypsum board shaft-wall assemblies indicated to have STC ratings, provide assembly materials and construction complying with requirements of assemblies whose STC ratings were determined according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent testing agency.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages, containers, and bundles bearing brand name and identification of manufacturer or supplier.
- B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat on leveled supports off the ground to prevent sagging.

1.8 PROJECT CONDITIONS

- A. Comply with requirements for environmental conditions, room temperatures, and ventilation specified in Division 9 Section "**Gypsum Board Assemblies.**"

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. American Gypsum Co.
 - 2. G-P Gypsum Corp.
 - 3. National Gypsum Company.
 - 4. United States Gypsum Co.

2.2 ASSEMBLY MATERIALS

- A. General: Provide materials and components complying with requirements of fire-resistance-rated assemblies indicated.
 - 1. Provide panels in maximum lengths available to eliminate or minimize end-to-end butt joints.
 - 2. Provide auxiliary materials complying with gypsum board shaft-wall assembly manufacturer's written recommendations.
- B. Steel Framing: ASTM C 645.
 - 1. Protective Coating: **ASTM A 653/A 653M, G40 (Z120), hot-dip galvanized** coating.
- C. Gypsum Liner Panels: Manufacturer's proprietary liner panels in **1-inch (25.4-mm)** thickness and with moisture-resistant paper faces.
- D. Gypsum Wallboard: ASTM C 36, core type as required by fire-resistance-rated assembly indicated.
 - 1. Edges: **Tapered**.
- E. Water-Resistant, Gypsum Backing Board: ASTM C 630/C 630M, core type as required by fire-resistance-rated assembly indicated.
- F. Cementitious Backer Units: ANSI A118.9, in manufacturer's standard thickness, but at least **1/2 inch (12.7 mm)** thick.
- G. Accessories: Cornerbead, edge trim, and control joints of material and shapes specified in Division 9 Section "**Gypsum Board Assemblies**" that comply with gypsum board shaft-wall assembly manufacturer's written recommendations for application indicated.
- H. Gypsum Wallboard Joint-Treatment Materials: ASTM C 475 and as specified in Division 9 Section "**Gypsum Board Assemblies**."
- I. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
 - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from **0.033 to 0.112 inch (0.84 to 2.84 mm)** thick.
 - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- J. Track (Runner) Fasteners: Power-driven fasteners of size and material required to withstand loading conditions imposed on shaft-wall assemblies without exceeding allowable design stress of track, fasteners, or structural substrates in which anchors are embedded.
 - 1. Powder-Actuated Fasteners: Provide powder-actuated fasteners with capability to sustain, without failure, a load equal to **10** times that imposed by shaft-wall assemblies, as determined by testing conducted by a qualified independent testing agency according to ASTM E 1190.
- K. Acoustical Sealant: **As recommended by gypsum board shaft-wall assembly manufacturer for application indicated.>**

- L. Sound Attenuation Blankets: ASTM C 665 for Type I, unfaced mineral-fiber-blanket insulation produced by combining thermosetting resins with mineral fibers manufactured from slag or rock wool.

2.3 GYPSUM BOARD SHAFT WALL

- A. Basis-of-Design Product: As indicated on Drawings by design designation of a qualified testing and inspecting agency.
- B. **Sustained** Air-Pressure Loads: **7.5 lbf/sq. ft. (0.36 kPa)**.
- C. Deflection Limit: **L/240**.
- D. Studs: Manufacturer's standard profile for repetitive members and corner and end members and for fire-resistance-rated assembly indicated.
 - 1. Depth: **4 inches (101.6 mm)**.
- E. Track (Runner): Manufacturer's standard J-profile track with long-leg length as standard with manufacturer, but at least **2 inches (51 mm)**, in depth matching studs.
- F. Jamb Struts: Manufacturer's standard J-profile strut with long-leg length of **3 inches (76.2 mm)**, in depth matching studs, and not less than **0.0341 inch (0.87 mm)** thick.
- G. Room-Side Finish: **Gypsum board, or Cementitious backer units as indicated**.
- H. Shaft-Side Finish: **As indicated by fire-resistance-rated assembly design designation**.
- I. STC Rating: **52**.
- J. Cavity Insulation: Sound attenuation blankets.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates to which gypsum board shaft-wall assemblies attach or abut, with Installer present, including hollow-metal frames, elevator hoistway door frames, cast-in anchors, and structural framing. Examine for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

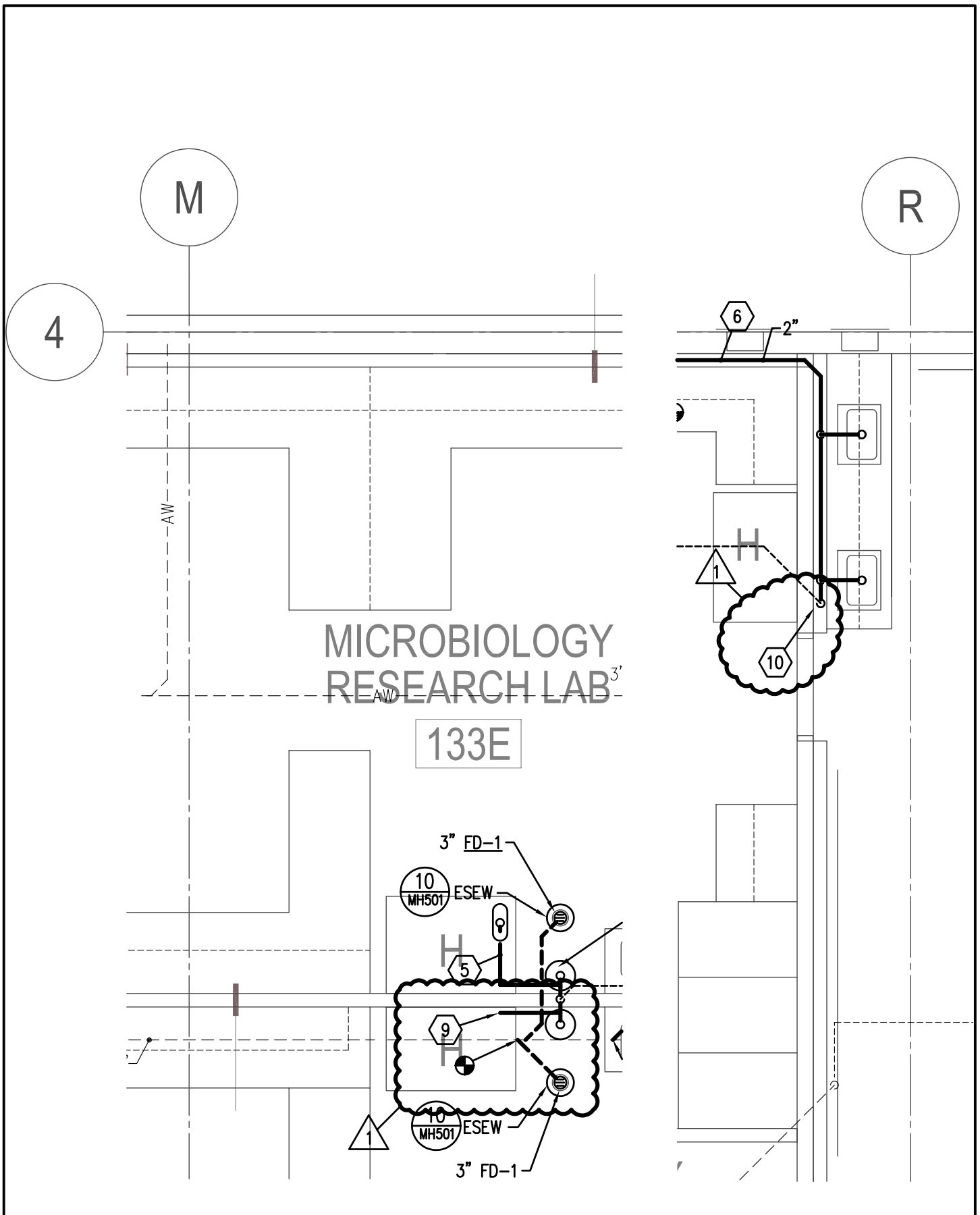
3.2 INSTALLATION


- A. General: Install gypsum board shaft-wall assemblies to comply with requirements of fire-resistance-rated assemblies indicated, manufacturer's written installation instructions, and the following:
 - 1. ASTM C 754 for installing steel framing.
 - 2. Division 9 Section "**Gypsum Board Assemblies**" for applying and finishing panels.

- B. Do not bridge building expansion joints with shaft-wall assemblies; frame both sides of joints with furring and other support.
- C. Install supplementary framing in gypsum board shaft-wall assemblies around openings and as required for blocking, bracing, and support of gravity and pullout loads of fixtures, equipment, services, heavy trim, furnishings, and similar items that cannot be supported directly by shaft-wall assembly framing.
 - 1. At elevator hoistway door frames, provide jamb struts on each side of door frame.
 - 2. Where handrails directly attach to gypsum board shaft-wall assemblies, provide galvanized steel reinforcing strip with **0.0312-inch (0.79-mm)** minimum thickness of base (uncoated) metal, accurately positioned and secured behind at least 1 face-layer panel.
- D. Integrate stair hanger rods with gypsum board shaft-wall assemblies by locating cavity of assemblies where required to enclose rods.
- E. At penetrations in shaft wall, maintain fire-resistance rating of shaft-wall assembly by installing supplementary steel framing around perimeter of penetration and fire protection behind boxes containing wiring devices, elevator call buttons, elevator floor indicators, and similar items.
- F. Isolate gypsum finish panels from building structure to prevent cracking of finish panels while maintaining continuity of fire-rated construction.
- G. Install control joints to maintain fire-resistance rating of assemblies.
- H. Seal gypsum board shaft walls with acoustical sealant at perimeter of each assembly where it abuts other work and at joints and penetrations within each assembly. Install acoustical sealant to withstand dislocation by air-pressure differential between shaft and external spaces; maintain an airtight and smoke-tight seal; and comply with manufacturer's written instructions or ASTM C 919, whichever is more stringent.
- I. In elevator shafts where gypsum board shaft-wall assemblies cannot be positioned within **2 inches (51 mm)** of the shaft face of structural beams, floor edges, and similar projections into shaft, install **1/2- or 5/8-inch- (12.7- or 15.9-mm-)** thick, gypsum board cants covering tops of projections.
 - 1. Slope cant panels at least 75 degrees from horizontal. Set base edge of panels in adhesive and secure top edges to shaft walls at **24 inches (610 mm)** o.c. with screws fastened to shaft-wall framing.
 - 2. Where steel framing is required to support gypsum board cants, install framing at **24 inches (610 mm)** o.c. and extend studs from the projection to the shaft-wall framing.

END OF SECTION 09265

AE301



Project: WSU TECH. BLDG. PROJECT NO. ET 01006	Sheet Title: ADDENDUM #1 KEYED NOTE CHANGES	Date: 2004-03-23	ARCH REF: ADD 1.01
		By: T. ELKINGTON	
Original Sheet No: PL101	 Colvin Engineering Associates, Inc. 244 West, 300 North, Suite 200 / Salt Lake City, Utah 84103-1108 (801) 322-2400 / Fax (801) 322-2416	Scale: 1/4" = 1'-0"	
		Job No: 2003-092.00	

KEYED NOTES

- 9 CONNECT CUP SINK TAILPIECE TO EMERGENCY EYEWASH TAILPIECE AHEAD OF TRAP, THEN CAP AT WALL FOR FUTURE CONNECTION.
- 10 INSTALL CUP SINK TRAP AT WALL AND CAP FOR FUTURE CONNECTION.



GENERAL NOTES

FINISHES:

- (E) LAB HOODS, VALVES, EMERGENCY SHOWERS AND EMERGENCY EYEWASHES ARE PROVIDED BY OWNER.



Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
PL101

Sheet Title:

ADDENDUM #1
KEYED & GENERAL NOTE CHANGES



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Job No: 2003-092.00

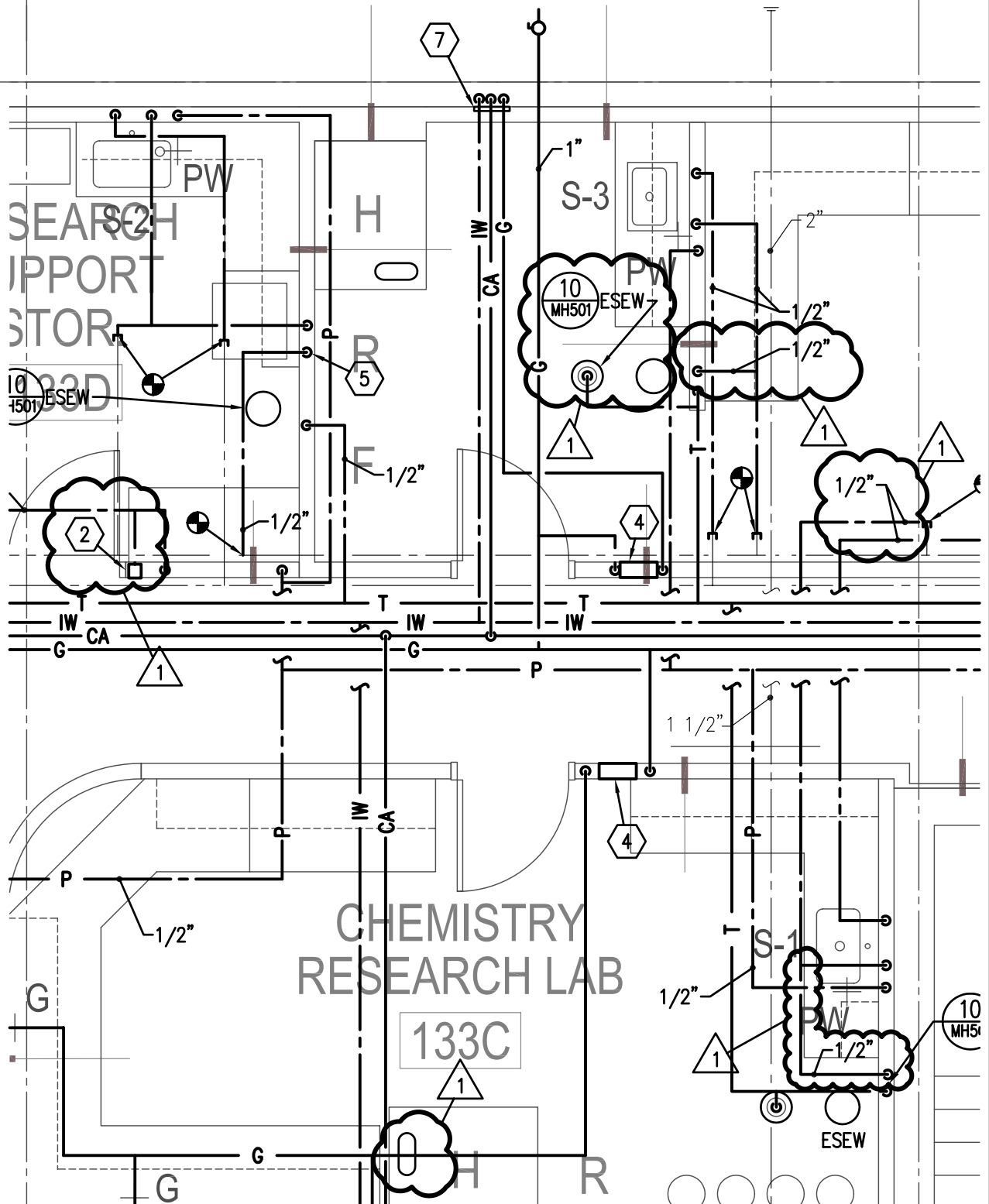
ARCH REF:

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1.02

N

P

4



Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
PL102

Sheet Title:

ADDENDUM #1



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Date: 2004-03-23

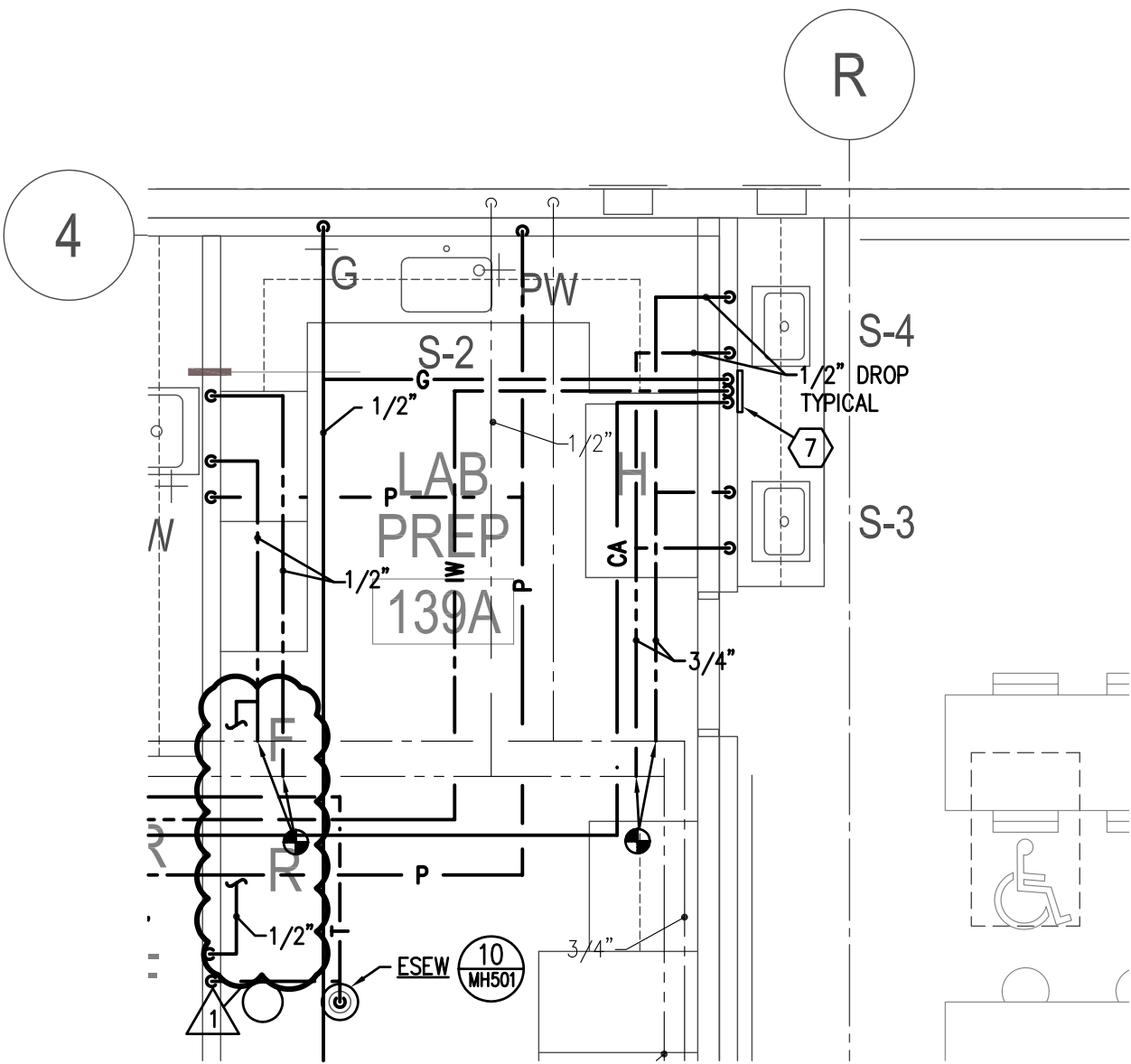
By: T. ELKINGTON

Scale: 1/4" = 1'-0"

Job No: 2003-092.00


ARCH REF:

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1.03

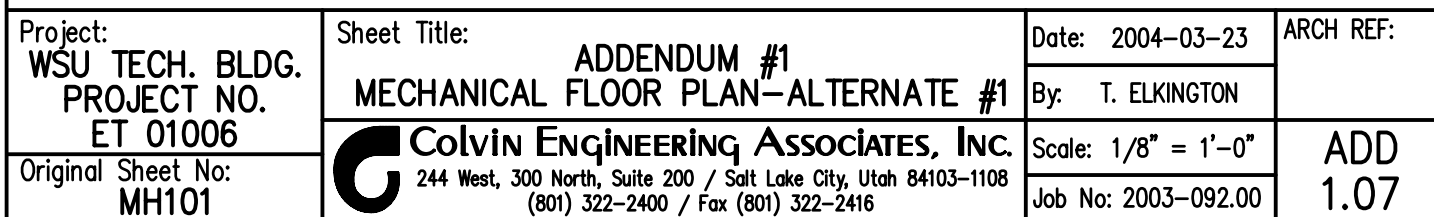


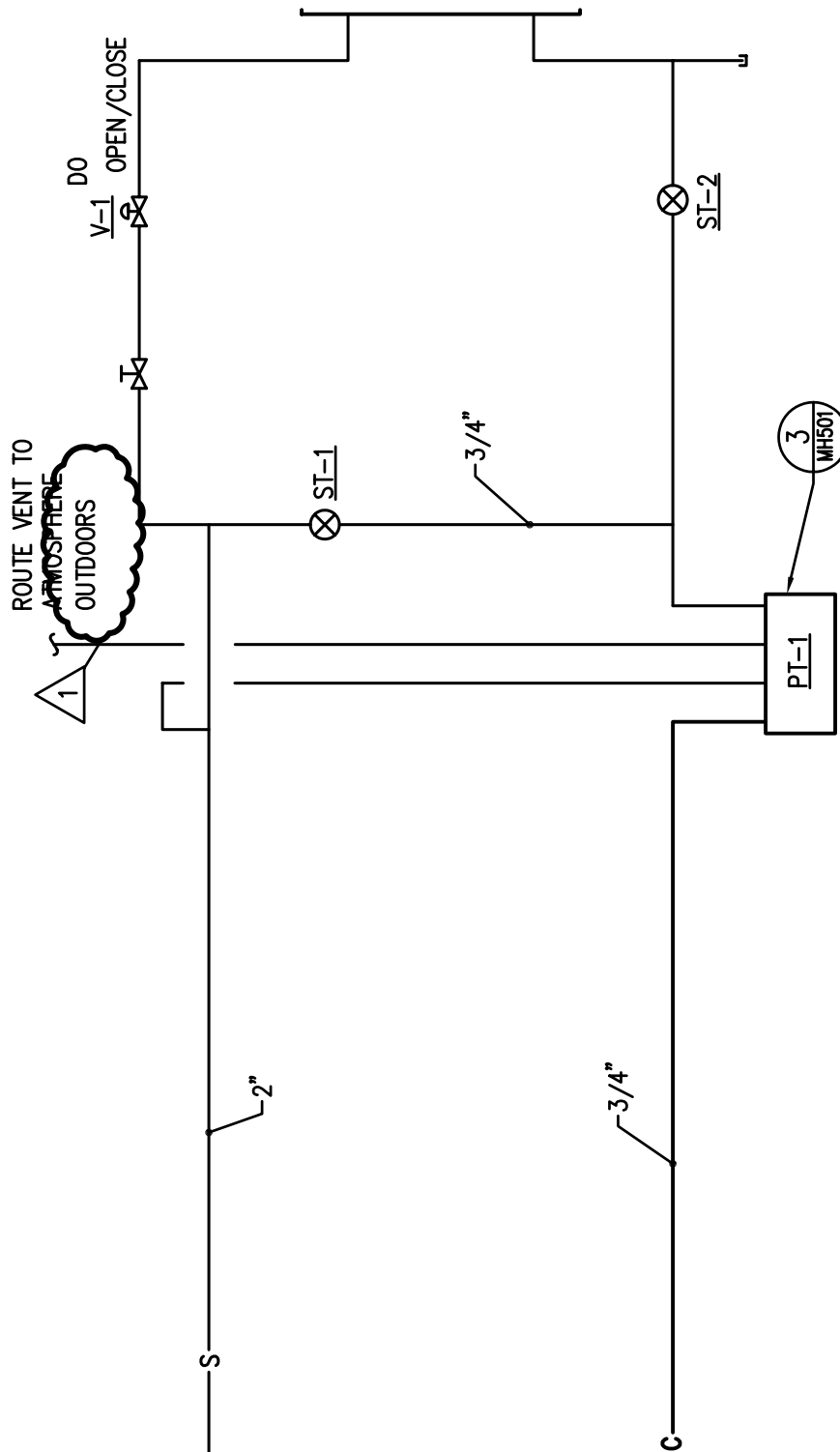
KEYED NOTES

- 2 TRAP PRIMER LOCATION
- 7 DROP HOOD SERVICES IN CHASE CREATED BETWEEN STUDS. PROVIDE BALL ISOLATION VALVES FOR IW AND CA. COORDINATE VALVE LOCATION WITH ACCESS PANEL SHOWN ON ARCHITECTURAL ELEVATIONS. PROVIDE HOOKUPS TO NEW HOODS OR STUB-OUTS FOR FUTURE CONNECTIONS.

Project: WSU TECH. BLDG. PROJECT NO. ET 01006	Sheet Title: ADDENDUM #1	Date: 2004-03-23	ARCH REF: ADD 1.04
		By: T. ELKINGTON	
Original Sheet No: PL102	 Colvin Engineering Associates, Inc. 244 West, 300 North, Suite 200 / Salt Lake City, Utah 84103-1108 (801) 322-2400 / Fax (801) 322-2416	Scale: 1/4" = 1'-0"	
		Job No: 2003-092.00	







STEAM PIPING DIAGRAM

SCALE: NONE

1

Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH401

Sheet Title:

ADDENDUM #1



Colvin Engineering Associates, Inc.
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(801) 322-2400 / Fax (801) 322-2416

Date: 2004-03-23

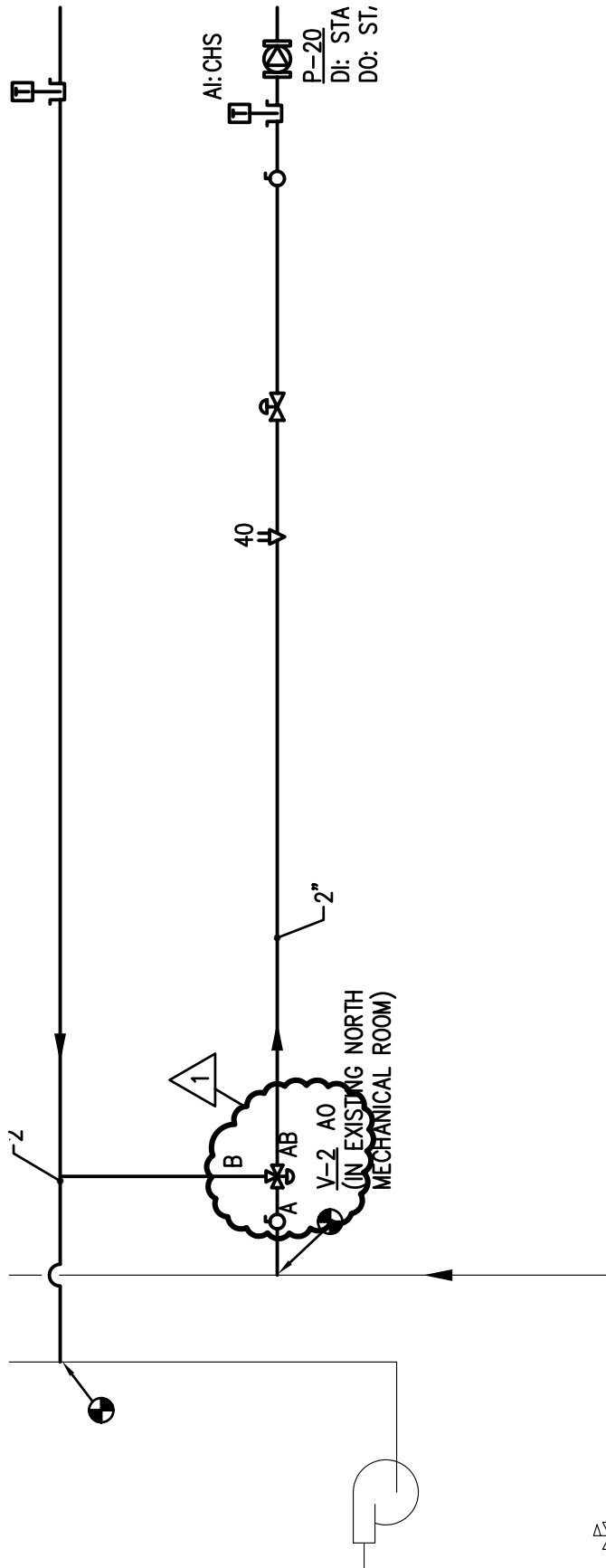
By: T. ELKINGTON

Scale: NO SCALE

Job No: 2003-092.00

ARCH REF:

ADD
1.08



CHILLED WATER PIPING DIAGRAM

SCALE: NONE

2

Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH401

Sheet Title:

ADDENDUM #1



Colvin Engineering Associates, Inc.
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Date: 2004-03-23

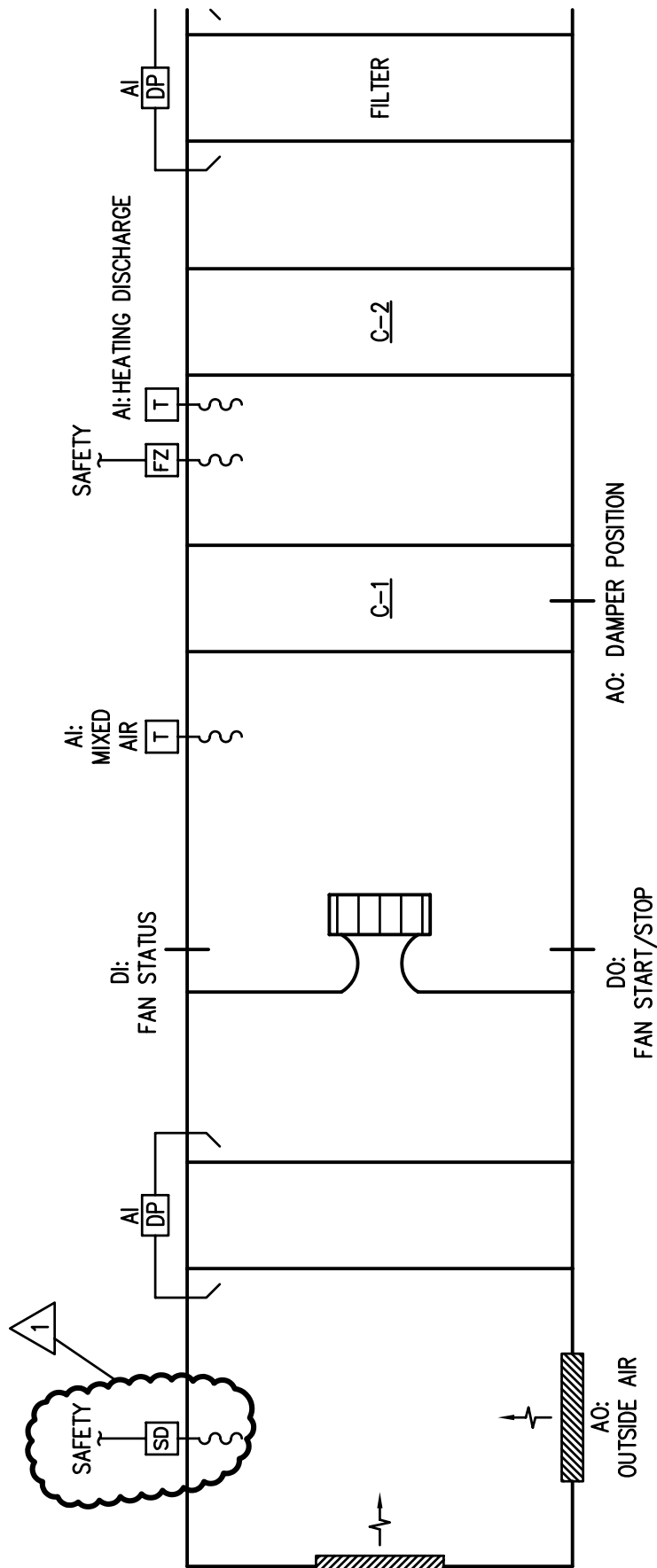
By: T. ELKINGTON

Scale: NO SCALE

Job No: 2003-092.00

ARCH REF:

ADD
1.09



AIR HANDLER CONTROL DIAGRAM

3

SCALE: NONE

Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH401

Sheet Title:

ADDENDUM #1



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Date: 2004-03-23

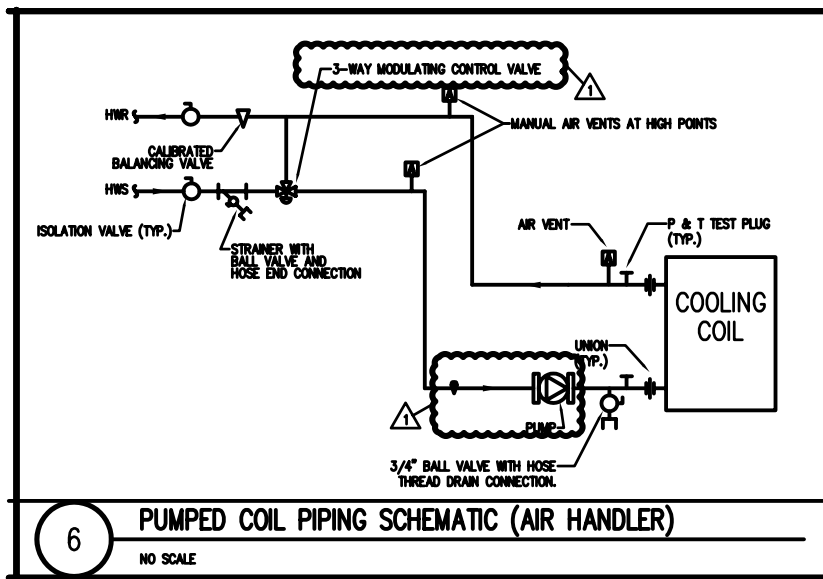
By: T. ELKINGTON

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Job No: 2003-092.00

ARCH REF:

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1.10



Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH501

Sheet Title:

ADDENDUM #1



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Date: 2004-03-23

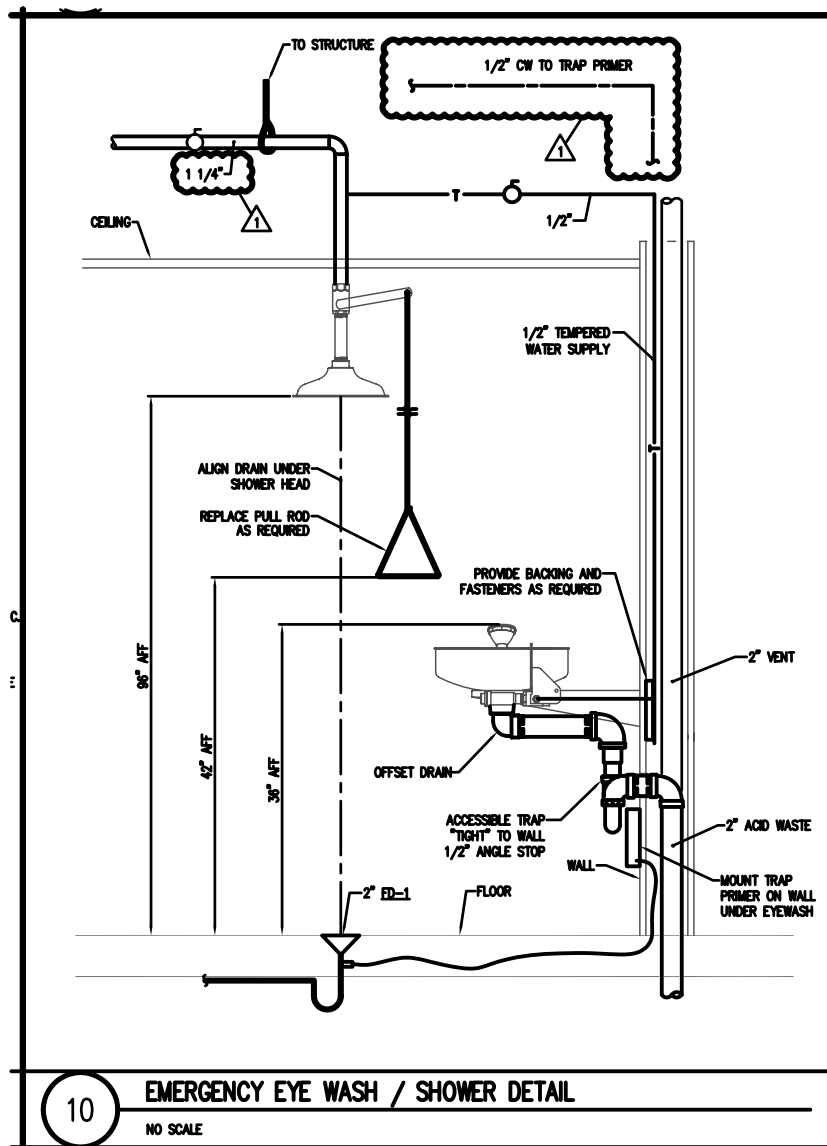
By: T. ELKINGTON

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Job No: 2003-092.00

ARCH REF:

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1.11



Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006
 Original Sheet No:
MH501

Sheet Title:
ADDENDUM #1

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Date: 2004-03-23
 By: T. ELKINGTON
 Scale: NO SCALE
 Job No: 2003-092.00

ARCH REF:
ADD
1.12

EXHAUST FAN SCHEDULE (EF)

PLAN CODE	AREA SERVED	TYPE	CFM @ ELEV.	ESP (± ELEV.)	FAN RPM	MOTOR			DAMPER (GRAVITY OR MOTOR)	METHOD OF CONTROL
						BHP	HP	VOLTAGE & PHASE		
EF-28	LAB HOODS	MIXED FLOW LAB EXHAUSTER	4,000	1.15	2009	2.73	3	460/3	GRAVITY	DDC

1

(EF)

METHOD OF CONTROL	OPENING SIZE	MAX. OPERATING WT. (LBS.)	MANUFACTURER / MODEL	REMARKS
DDC	21-3/8 X 21-3/8	900	COOK 150 QMXLE	UL 705 WITH FACTORY CURB EPOXY OR POLYESTER COATING ON ALL SURFACES EXPOSED TO AIRSTREAM

1

Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH601

Sheet Title:

ADDENDUM #1



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(801) 322-2400 / Fax (801) 322-2416

Date: 2004-03-23

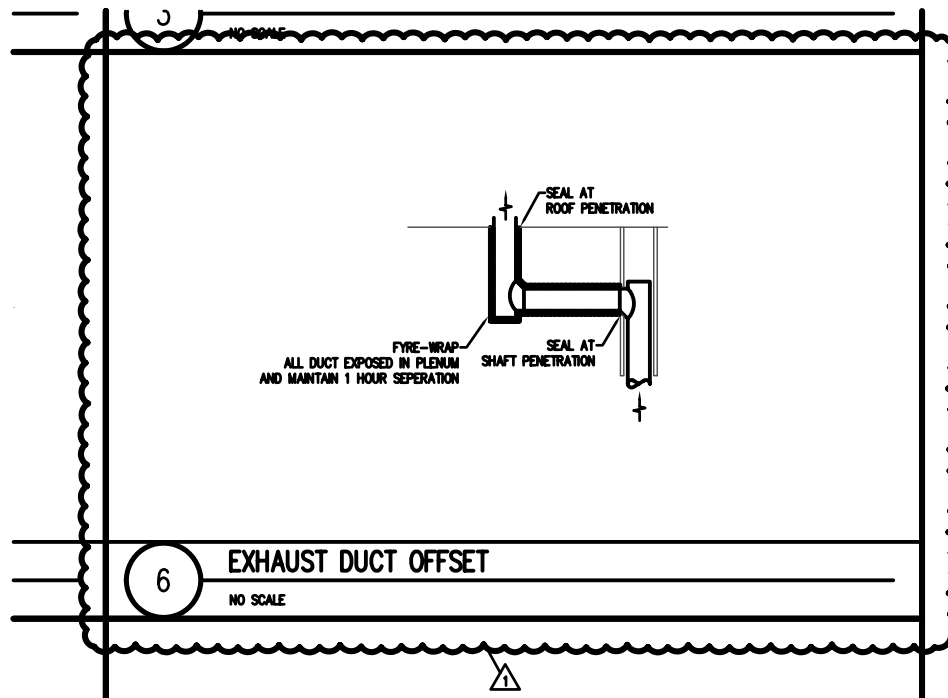
By: T. ELKINGTON


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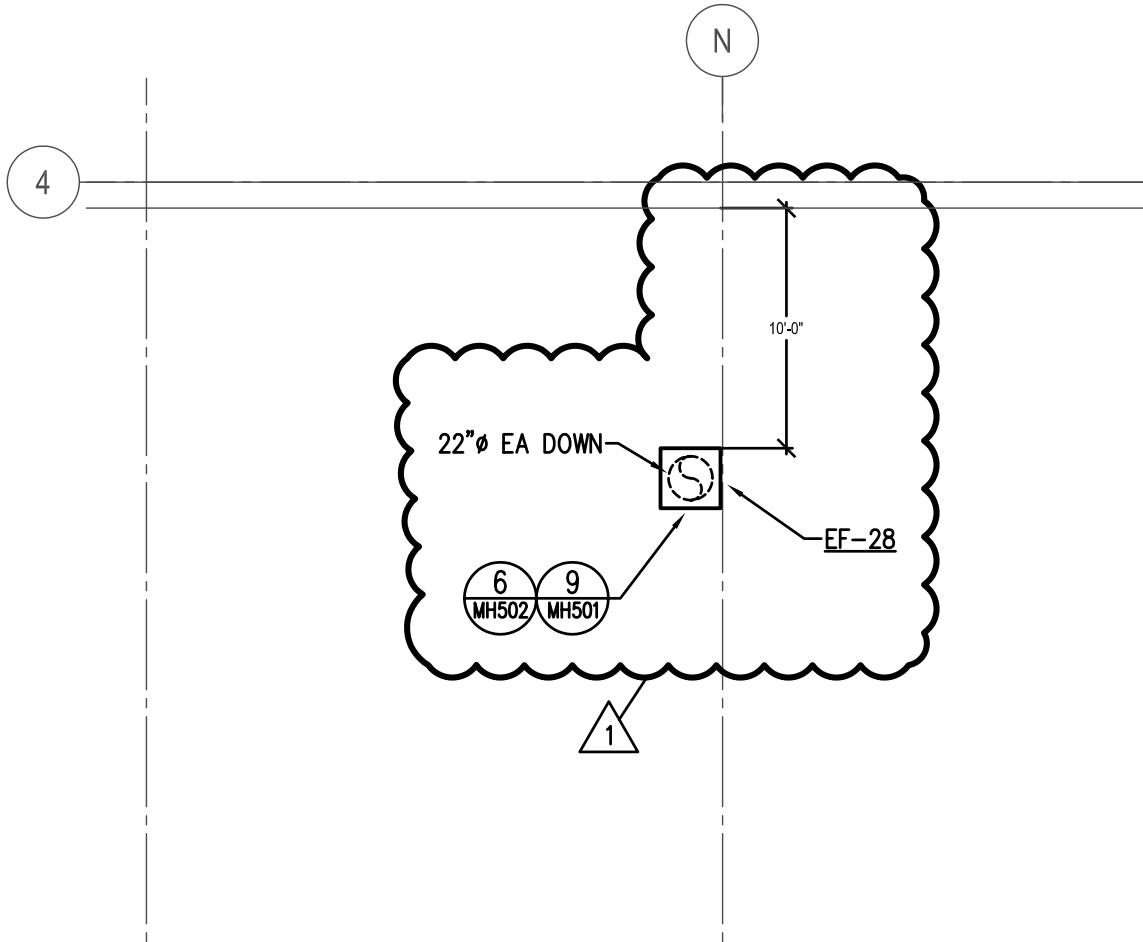
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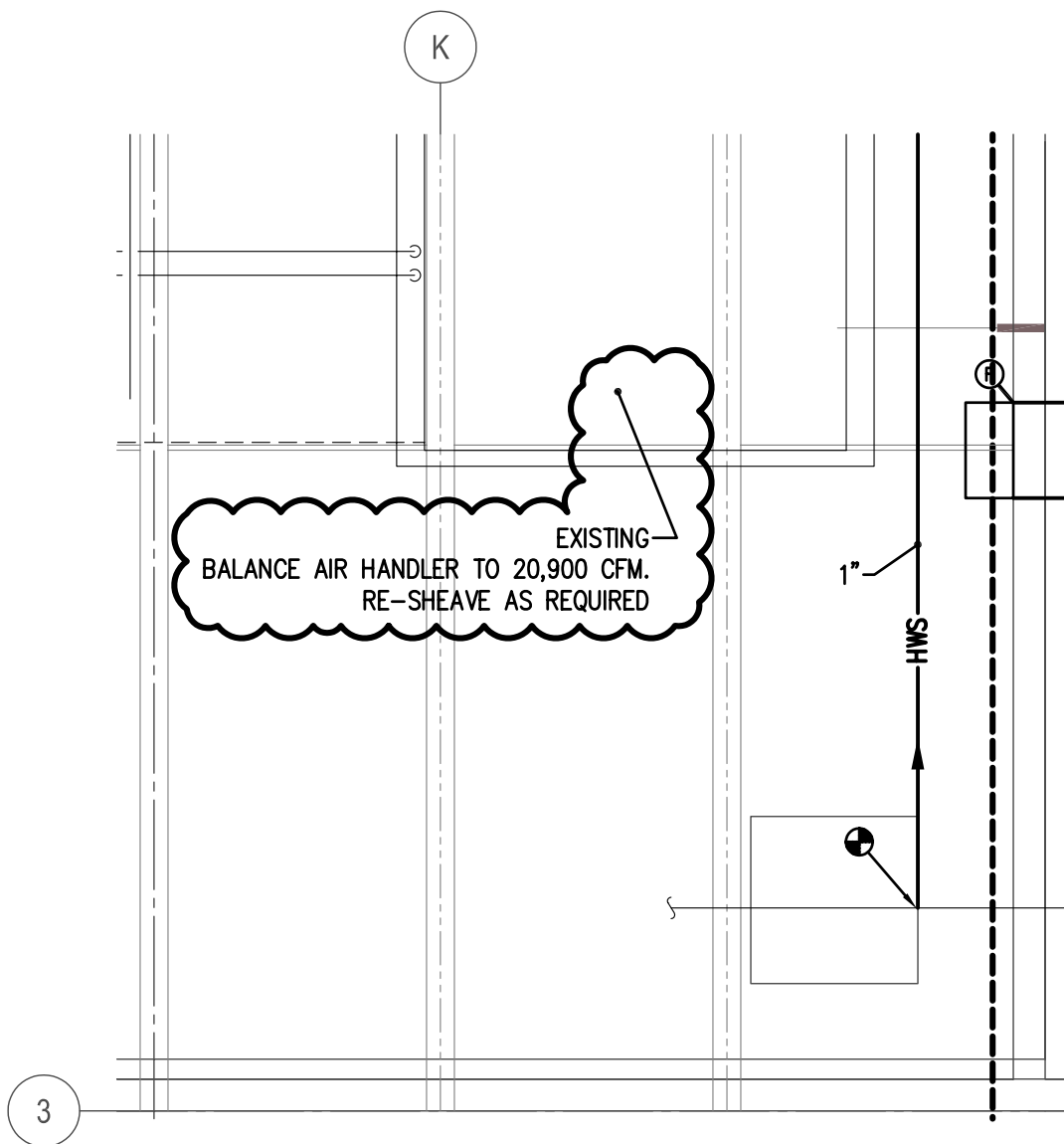
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Project: WSU TECH. BLDG. PROJECT NO. ET 01006	Sheet Title: ADDENDUM #1 ADDED DETAIL	Date: 2004-03-23	ARCH REF:
		By: T. ELKINGTON	
Original Sheet No: MH502	 Colvin ENGINEERING ASSOCIATES, INC. 244 West, 300 North, Suite 200 / Salt Lake City, Utah 84103-1108 (801) 322-2400 / Fax (801) 322-2416	Scale: 1/4" = 1'-0"	ADD 1.14
		Job No: 2003-092.00	



Project: WSU TECH. BLDG. PROJECT NO. ET 01006	Sheet Title: ADDENDUM #1 ROOF PLAN	Date: 2004-03-23	ARCH REF:
		By: T. ELKINGTON	
Original Sheet No: MH101	 Colvin ENGINEERING ASSOCIATES, INC. 244 West, 300 North, Suite 200 / Salt Lake City, Utah 84103-1108 (801) 322-2400 / Fax (801) 322-2416	Scale: 1/8" = 1'-0"	ADD 1.15
		Job No: 2003-092.00	



Project:
WSU TECH. BLDG.
PROJECT NO.
ET 01006

Original Sheet No:
MH201

Sheet Title:

ADDENDUM #1
BALANCE AIR HANDLER

Colvin Engineering Associates, Inc.
 244 West, 300 North, Suite 200 / Salt Lake City, Utah 84103-1108
 (801) 322-2400 / Fax (801) 322-2416

Date: 2004-03-23

By: T. ELKINGTON

Scale: 1/4" = 1'-0"

Job No: 2003-092.00

ARCH REF:

ADD
1.16